Docket No.: SONYJP 3.0-1018

Application No.: 10/663,422

IN THE CLAIMS

(currently amended) An information processing apparatus, comprising:

receiving means having a plurality of inputs—for respectively—receiving a first request signal from a given one of a plurality of modules and a second request signal from another one of the plurality of modules, the first request signal for—requesting bus acquisition for each—the given one of a—the plurality of modules and the second request signal requesting bus acquisition for the another one of the plurality of modules, the given one of the plurality of modules, the given one of the plurality of modules being one of including—an encoder and a decoder and the another one of the plurality of modules being another of the encoder and the decoder;

measurement means for measuring a <u>first</u> time <u>interval</u>

limit of each of said plurality of modules based on <u>from</u>

when the <u>first</u> request signal <u>is</u> received by each of said

plurality of inputs of said receiving means and for

measuring a second time interval from when the second

request signal is received by said receiving means;

comparison means for comparing the measured first time interval to each of a first predetermined value and a second predetermined value and for comparing the measured second time interval to each of the first predetermined value and the second predetermined value, the second predetermined value being greater than the first predetermined value;

priority determination assignment means for determining assigning a higher priority of bus acquisition of said to the given one of the plurality of modules or to the another one of the plurality of modules based on a result of the comparing carried out according to the time limit measured by said measurement comparison means; and

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control means for controlling acquisition of the bus for said—the plurality of modules based on the assigned higher priority—determined by said priority—determination means, wherein—said step of determining priority—determines said—priority—of—bus—acquisition—by—a first—result—of—judging—whether—the request signal is received from—said—encoder—or—said—decoder—and—a—second—result—of—judging—whether—the request signal—is received from—the other—of—said—modules—based—on—said—first result.

- (currently amended) The information processing 2. according to claim 1, wherein said apparatus determination—assignment means determines—assigns the higher priority by means of using a round-robin method when either: (i) the first time interval and the second time interval are each less than the first predetermined value, (ii) the first time interval and the second time interval are each greater than the first predetermined value and less than the second predetermined value, or (iii) the first time interval and the second time interval are each greater than the second predetermined valuethere is a plurality of modules having a same time limit as measured by said measurement means.
- 3. (currently amended) An information processing method, comprising—the steps of:

receiving a <u>first</u> request signal <u>from a given one of a plurality of modules and a second request signal from another one of the plurality of modules, the first request signal <u>for</u> requesting bus acquisition for <u>each</u> the given one of <u>a</u> the plurality of modules and the second request signal requesting bus acquisition for the another one of the plurality of modules, the given one of the plurality of modules being one of <u>including</u> an encoder and a decoder and the another one of the plurality of modules being another of the encoder and the decoder;</u>

measuring a <u>first</u> time <u>interval</u> <u>limit of each of said</u>

plurality of modules based on a from when the first request signal is received and a second time interval from when the second request signal is received requesting bus acquisition received for each of the plurality of modules;

comparing the measured first time interval to each of a first predetermined value and a second predetermined value and comparing the measured second time interval to each of the first predetermined value and the second predetermined value, the second predetermined value being greater than the first predetermined value;

assigning determining higher priority of bus acquisition of said to the given one of the plurality of modules or to the another one of the plurality of modules based on a result of according to a time limit as measured in said comparing measuring; and

controlling acquisition of the bus for said the plurality of modules based on the assigned higher priority as determined in said step of determining priority, wherein said priority determination means determines said priority of bus acquisition by a first result of judging whether the request signal is received from said encoder or said decoder and a second result of judging whether the request signal is received from the other of said modules based on said first result.

- 4. (Canceled)
- 5. (Canceled)
- 6. (new) The information processing apparatus according to claim 1, wherein said priority assignment means assigns the higher priority to the given one of the plurality of modules when either: (i) the first time interval is greater than the first predetermined value and the second time interval is less than the first predetermined value or (ii) the first

time interval is greater than the second predetermined value and the second time interval is less than the second predetermined value.

- 7. (new) The information processing apparatus according to claim 1, wherein said priority assignment means assigns the higher priority of bus acquisition to the another one of the plurality of modules when either: (i) the first time interval is less than the second predetermined value and the second time interval is greater than the second predetermined value or (ii) the first time interval is less than the first predetermined value and the second time interval is greater than the first predetermined value.
- 8. (new) The information processing method according to claim 3, wherein said step of assigning higher priority assigns the higher priority to the given one of the plurality of modules when either: (i) the first time interval is greater than the first predetermined value and the second time interval is less than the first predetermined value or (ii) the first time interval is greater than the second predetermined value and the second time interval is less than the second predetermined value and the second time interval is less than the second predetermined value.
- 9. (new) The information processing method according to claim 3, wherein said step of assigning higher priority assigns the higher priority of bus acquisition to the another one of the plurality of modules when either: (i) the first time interval is less than the second predetermined value and the second time interval is greater than the second predetermined value or (ii) the first time interval is less than the first predetermined value and the second time interval is greater than the first predetermined value.
- 10. (new) The information processing method according to claim 3, wherein said step of assigning priority assigns the higher priority using a round-robin method when

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either: (i) the first time interval and the second time interval are each less than the first predetermined value, (ii) the first time interval and the second time interval are each greater than the first predetermined value and less than the second predetermined value, or (iii) the first time interval and the second time interval are each greater than the second predetermined value.